



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,209	12/05/2003	Jean-Pierre Duplessis	MS306247.01/MSFTP552US	9483
27195 7590 10/31/2007 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER TRAORE, FATOUMATA	
			ART UNIT 2136	PAPER NUMBER
			NOTIFICATION DATE 10/31/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com  
hholmes@thepatentattorneys.com  
osteuball@thepatentattorneys.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/729,209	<b>Applicant(s)</b> DUPLESSIS ET.AL.	
	<b>Examiner</b> Fatoumata Traore	<b>Art Unit</b> 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10,13,15-17,19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10,13,15-17,19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This is in response to the amendment filed on September 24<sup>th</sup>, 2007. Claim 15 has been amended. Claims 1-10, 12, 13, 15-17, 19, 21, 22 are pending and have been considered below.

#### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-10, 12, 13, 15-17, 19, 21, and 22 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The Applicant's arguments, see page 7, filed September 24<sup>th</sup>, 2007, with respect to the rejection of claims 1, 12, 21, and 22 have been fully considered and are persuasive. The rejection of claims 1, 12, 21, and 22 has been withdrawn.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ayyagari et al (US 2002/0176366).

**Claims 1, 19, 21, and 22:** Ayyagari et al discloses a system, a data packet, and a computer readable medium for achieving zero-configuration wireless computing comprising:

- i. A connection component that can connect a device to a plurality of wireless networks (The approach of the present invention performs automatic network connectivity with the "appropriate" network based on various parameters, as may be set by the user and/or programmatically determined by an application) (paragraphs [0010], [0054]; Fig. 6 step 274); and
- ii. A detection component that automatically identifies an encryption type of an available wireless network (the system operates by periodically scanning across all wireless channels to determine currently available infrastructure networks) (paragraph [0011]; Fig. 6 steps 264 and 292), wherein identification of the encryption type is based at least in part upon a failure of a portion of an authentication sequence or exceeding a time threshold during the authentication sequence (In the event it does not succeed, the system may attempt to associate with other detected infrastructure networks) (paragraphs [0011], [0051], [0055]).

**Claim 2:** Ayyagari et al discloses a system for achieving zero-configuration wireless computing as in claim 1 above, and further discloses that the identification by the detection component being based, at least in part, upon receipt of an information element from a wireless network beacon (this preferred channel selection, in one embodiment, is based on appropriate frequency reuse principles and the channels used and received signal strength from beaconing sources) (paragraphs [0011], [0049], [0059]).

**Claim 3:** Ayyagari et al discloses a system for achieving zero-configuration wireless computing as in claim 1 above, and further discloses that the wireless network comprising at least one of an unencrypted network, a Wired Equivalent Privacy (WEP) network requiring a WEP key, a Wi-Fi Protected Access (WPA) encrypted network requiring a WPA pre-shared key, an 802.11x-enabled network that does not support WPA, an 802.11x-enabled network that does support WPA and a wireless provisioning services (WPS) support-enabled network (paragraph [0012]).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-10, 12, 13, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayyagari et al (US 2002/0176366) in view of Krantz et al (US 2004/0111520).

**Claim 4:** Ayyagari et al discloses a system for achieving zero-configuration wireless computing as in claim 1 above, but does not explicitly disclose that the identification by the detection component being based, at least in part, upon iterative probing of the available network. However, Krantz et al discloses an automatic provisioning system, which further discloses that the identification by the detection component being based, at least in part, upon iterative probing of the available network (Client 205 may detect available wireless networks, such as, for example, by receiving IEEE 802.11 beacon frames and/or by sending IEEE 802.11 probe request frames and receiving IEEE 802.11 probe response frames) (paragraph [0066]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a step of probing available network in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Krantz et al.

**Claim 5:** Ayyagari et al and Krantz et al disclose a system for achieving zero-configuration wireless computing as in claim 4 above, and Ayyagari et al further discloses that the detection component attempts to connect to the wireless

network as a wireless provisioning services-supporting network(the system of the present invention attempts to perform an IEEE 802.11 association with the selected SSID 286) (paragraph [0013]), the detection component determining that the network is a pre-shared key network if a failure in an authentication sequence from a wireless network beacon is determined (In the event it does not succeed, the system may attempt to associate with other detected infrastructure networks)(paragraphs [0011], [0055]).

**Claim 6:** Ayyagari et al and Ktantz et al disclose a system for achieving zero-configuration wireless computing as in claim 5 above, and Ayyagari et al further discloses that the detection component determining that the network is a Wi-Fi Protected Access network if a failure in a particular piece of the authentication sequence that identifies a wireless provisioning services supporting network is determined (Fig.3 items 224 and 226).

**Claim 7:** Ayyagari et al and Ktantz et al disclose a system for achieving zero-configuration wireless computing as in claim 6 above, and Ktantz et al further discloses that the particular piece of the authentication sequence comprising a type, length value sequence (server 215 can send an EAP Type-Length-Value ("TLV") objects within PEAP to client 205) (paragraphs [0019], [0067], [0079]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a type length-value in the authentication sequence in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with

appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Ktantz et al.

**Claim 8:** Ayyagari et al and Ktantz et al disclose a system for achieving zero-configuration wireless computing as in claim 6 above, and Ayyagari et al further discloses that the detection component determining that the network is a wireless provisioning services supporting network if the particular piece of authentication sequence identifying the wireless provisioning services supporting network is received from the wireless network beacon (this preferred channel selection, in one embodiment, is based on appropriate frequency reuse principles and the channels used and received signal strength from beaconing sources) (paragraphs [0011], [0049], [0059]).

**Claim 9:** Ayyagari et al discloses a system for achieving zero-configuration wireless computing as in claim 1 above, but does not explicitly disclose that the detection component sends at least one of a connect message, an 802.1x Extensible Authentication Protocol Over Lan (EAPOL) start message, an 802.1x identity message. However, Krantz et al discloses an automatic provisioning system, which further discloses that the detection component sends at least one of a connect message, an 802.1x Extensible Authentication Protocol Over Lan (EAPOL) start message, an 802.1x identity message (computer systems can attempt to authenticate with one another through the transfer of EAP messages (e.g., start messages, response messages, request messages, accept messages, reject messages, etc) (paragraphs [0068], [0069], [0071]). Therefore,



it would have been obvious to one having ordinary skill in the art at the time the invention was made to send at least one connect message, a start message in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Krantz et al.

**Claim 10:** Ayyagari et al discloses a system for achieving zero-configuration wireless computing as in claim 1 above, but does not explicitly disclose that the detection component receives at least one of an associated message, an 802.1x identity request message, an authentication message and a provisioning message from a wireless network beacon. However, Krantz et al discloses an automatic provisioning system, which further discloses that the detection component receives at least one of an associated message, an 802.1x identity request message, an authentication message and a provisioning message from a wireless network beacon (access point 209 can detect that the connection is active and can send an EAP-Request/Identity message to client 205) (paragraph [0073]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to send at least one connect message, a start message in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Krantz et al.

**Claim 12:** Ayyagari et al discloses a method for achieving zero-configuration wireless computing comprising:

- i. Attempting to connect to a wireless network as a wireless provisioning services supporting network The approach of the present invention performs automatic network connectivity with the "appropriate" network based on various parameters, as may be set by the user and/or programmatically determined by an application) (paragraphs [0010], [0054]; Fig. 6 step 274);
- ii. Automatically identifying the encryption type of the wireless network (paragraph [0011]; Fig. 6 steps 264 and 292), wherein identification of the encryption type is based at least in part upon a failure of a portion of an authentication sequence or exceeding a time threshold during the authentication sequence determining whether the attempt was successful (In the event it does not succeed, the system may attempt to associate with other detected infrastructure networks)(paragraphs [0011], [0051], [0055]); and

But does not explicitly disclose a step of prompting for a wired equivalent privacy key, if the attempt was not successful. However, Krantz et al discloses an automatic provisioning system, which further discloses a step of prompting for a wired equivalent privacy key, if the attempt was not successful (Through the use of beacon and probe frames client 205 can also detect other configuration settings of an access point, such as, for example supported types of encryption

(e.g., Wire Equivalent Protection ("WEP") or Temporal Key Integrity Protocol ("TKIP"))(paragraph [0066]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to prompt the user for WEP key in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Ktantz et al.

**Claim 13:** Ayyagari et al and Ktantz et al disclose a method for achieving zero-configuration wireless computing as in claim 12 above, and Ayyagari et al further discloses:

- i. Waiting up to a threshold period of time for a particular piece of authentication information that identifies a wireless provisioning services supporting network (In the event it does not succeed, the system may attempt to associate with other detected infrastructure networks) (paragraphs [0011], [0051], [0055]);  
determining whether the particular piece of authentication information has been received sequence (In the event it does not succeed, the system may attempt to associate with other detected infrastructure networks) (paragraphs [0011], [0051], [0055]);
- ii. Identifying the wireless network as a wireless provisioning services supporting network, if the particular piece of authentication information has been received (If this option is selected, the user thereafter may select the

authentication method, e.g., EAP-TLS, EAP-MD5, or EAP-MSCHAP (via, e.g., a pull-down menu) to be used. When this authentication option setting is set, the STA will preferably use the IEEE 802.11 open authentication mode) (paragraph [0042].

But does not explicitly disclose a step of identifying the wireless network as a Wi-Fi Protected Access (WPA) network, if the particular piece of authentication information has not been received. However, Ktantz et al further discloses a step of identifying the wireless network as a Wi-Fi Protected Access (WPA) network, if the particular piece of authentication information has not been received (The defined "WPA" element (line 24) can be included in a configuration file to indicate that authentication is performed in accordance with WiFi Protected Access) (paragraph [0094]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to identify the network as a WPA network in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Ktantz et al.

**Claim 15:** Ayyagari et al discloses a method facilitating wireless network detection comprising:

- i. Determining whether a wireless network supports 802. 1x, based at least in part upon a failure of a portion of an authentication sequence or exceeding a time threshold during the authentication sequence (In the

event it does not succeed, the system may attempt to associate with other detected infrastructure networks) (paragraphs [0011], [0051], [0055]);

ii. Determining whether the wireless network supports wireless provisioning services, if the wireless network supports 802.1x based at least in part upon a failure of a portion of an authentication sequence or exceeding a time threshold during the authentication sequence (In the event it does not succeed, the system may attempt to associate with other detected infrastructure networks) (paragraphs [0011], [0051], [0055]);

But does not explicitly disclose a step of Identifying the wireless network as an wired equivalent privacy network requiring a wired equivalent privacy key, if the wireless network does not support 802.1x, or a step of identifying the wireless networks as an 802.1x network, if the wireless network does not supporting wireless provisioning services or a step of Identifying the wireless network as a wireless provisioning services supporting network, if the wireless network supports wireless provisioning services. However, Krantz et al discloses an automatic provisioning system, which further discloses

i. Identifying the wireless network as an wired equivalent privacy network requiring a wired equivalent privacy key, if the wireless network does not support 802.1x (the defined "Non802.1XURL" element (line 50) can be included in a configuration sub-file to indicate a URL that can be accessed for Non-802.1X authentication) (paragraph [0098]).

ii. Identifying the wireless network as an 802. 1x network, if the wireless network does not supporting wireless provisioning services (the defined "Open" element (line 22) can be included in a configuration sub-file to indicate open authentication. That is, authentication does not use a pre-shared key required to authenticate with an access point) (paragraph [0094]); and

ii. Identifying the wireless network as a wireless provisioning services supporting network, if the wireless network supports wireless provisioning services The defined "Open" element (line 22) can be included in a configuration sub-file to indicate open authentication. That is, authentication does not use a pre-shared key required to authenticate with an access point) (paragraph [0094]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to identify the wireless networks type in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Ktantz et al.

**Claim 16:** Ayyagari et al and Ktantz et al disclose a method for achieving zero-configuration wireless computing as in claim 15 above, and Ktantz et al further discloses that the method comprising at least one of the following acts:

- i. Determining whether the wireless networks is encryption enabled (the defined encryption element (lines 29-39) further defines the types of encryption that may be supported by a network) (paragraph [0095]);
- ii. Determining whether the wireless network is a Wi-Fi Protected Access (WAP) network (the defined "WPA" element (line 24) can be included in a configuration file to indicate that authentication is performed in accordance with WiFi Protected Access) (paragraph [0094]);  
and,
- iii. Determining whether the wireless network is a Wi-Fi Protected Access (WAP) pre-shared key network (the defined "WPAPSK" element (line 25) can be included in a configuration sub-file to indicate that authentication is performed in accordance with WiFi Protected Access-Pre-Shared Key authentication) (paragraph [0094]);

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to identify the wireless networks type in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Ktantz et al.

**Claim 17:** Ayyagari et al and Ktantz et al disclose a method for achieving zero-configuration wireless computing as in claim 16 above, and Ktantz et al further discloses that the method further comprising at least one of the following acts:

Art Unit: 2136

- i. Identifying the wireless network as unencrypted, if the wireless network is not encryption enabled (paragraph [0098]); and,
- ii. Identifying the wireless network as a Wi-Fi Protected Access pre-shared key network (The defined "WPA" element (line 24) can be included in a configuration file to indicate that authentication is performed in accordance with WiFi Protected Access) (paragraph [0094]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to identify the wireless networks type in Ayyagari et al's disclosure. One would have been motivated to do so in order to automatically providing a computer system with appropriate information such that the computer system can be provisioned to communicate on a network as discussed (paragraph [0002]) by Ktantz et al.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chiu Auto-detection of wireless network accessibility US 2003/0204748.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fatoumata Traore whose telephone number is (571) 270-1685. The examiner can normally be reached Monday through Thursday from 7:00 a.m. to 4:00 p.m. and every other Friday from 7:30 a.m. to 3:30 p.m.



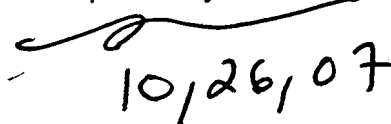
Art Unit: 2136

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nassar G. Moazzami, can be reached on (571) 272 4195. The fax phone number for Formal or Official faxes to Technology Center 2100 is (571) 273-8300. Draft or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2685.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-2100.

FT  
Friday October 26<sup>th</sup>, 2007

Nassar G. Moazzami  
Supervisory Patent Examiner



10/26/07